

CLAIMS

What is Claimed Is:

1. A method of recording compatibility information on a recording medium, comprising:
 - providing a physical format information zone having a reserved zone; and
 - recording extended part version information in the reserved zone of the physical format information zone, said recording of the extended part version information comprising recording a detailed extended part version comprising a primary digit in the reserved zone.
2. The method of claim 1, wherein the recording of the extended part version information further comprises recording a latest part version having recording compatibility with a recording/reproducing apparatus of a given specification level in the reserved zone.
3. The method of claim 2, wherein the recording of the extended part version information further comprises recording a latest part version having reproducing compatibility with the recording/reproducing apparatus in the reserved zone.
4. The method of claim 3, wherein the recording of the latest part version having recording compatibility with the recording/reproducing apparatus, and the recording of the latest part version having reproducing compatibility with the recording/reproducing apparatus, each further comprise recording a primary digit in the reserved zone.
5. The method of claim 4, wherein the recording of the detailed extended part version, the recording of the latest part version having recording compatibility with the recording/reproducing apparatus, and the recording of the latest part version having reproducing compatibility with the recording/reproducing apparatus each further comprise recording a first sub-digit immediately after the first decimal place.

1 6. The method of claim 5, further comprising recording said primary digit, and said
2 first sub-digit in the form of n.x.

1 7. The method of claim 6, wherein n represents a specification change, and x
2 represents a specification change having no compatibility with the recording/reproducing
3 apparatus.

1 8. The method of claim 7, further comprising recording non-extended part version
2 information in an unreserved zone of the physical format information zone, wherein said
3 non-extended part version information indicates that the extended part version information is
4 recorded in a different location.

1 9. A recording medium comprising:
2 a physical format information zone having a reserved zone; and
3 extended part version information in the reserved zone of said physical format
4 information zone, said extended part version comprising a detailed extended part version
5 comprising a primary digit.

1 10. The recording medium of claim 9, wherein said extended part version information
2 further comprises a latest part version having recording compatibility with a
3 recording/reproducing apparatus of a given specification level.

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5 11. The recording medium of claim 10, wherein said extended part version information
6 further comprises a latest part version having reproducing compatibility with the
7 recording/reproducing apparatus.

1 12. The recording medium of claim 11, wherein said latest part version having
2 recording compatibility with the recording/reproducing apparatus, and said latest part version

3 having reproducing compatibility with the recording/reproducing apparatus each further
4 comprise a primary digit.

1 13. The recording medium of claim 12, wherein said detailed extended part version,
2 said latest part version having recording compatibility with the recording/reproducing
3 apparatus, and said latest part version having reproducing compatibility with the
4 recording/reproducing apparatus each further comprise a first sub-digit.

1 14. The recording medium of claim 13, wherein said primary digit and said first sub-
2 digit are in the format n.x.

1 15. The recording medium of claim 14, wherein n represents a specification change,
2 and x represents a specification change having no compatibility with the recording/reproducing
3 apparatus.
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1 16. The recording medium of claim 15, wherein said reserved zone is 6 bytes in size,
2 and said detailed extended part version, said latest part version having recording compatibility
3 with the recording/reproducing apparatus, and said latest part version having reproducing
4 compatibility with the recording/reproducing apparatus, are each 2 bytes in size.
5

1 17. The recording medium of claim 16, wherein said primary digit and said first sub-
2 digit are each 4 bits in size.

1 18. The recording medium of claim 17, wherein said physical format information zone
2 further comprises an unreserved part version zone 4 bits in size, wherein said unreserved part
3 version zone is located at a byte position 0 of said physical format information zone, and said
4 reserved zone of said physical format information zone is located at a byte position 17 through
5 a byte position 22 of said physical format information zone.

1 19. The recording medium of claim 18, wherein said detailed extended part version is
 2 located at said byte position 17 through a byte position 18 of said physical format information
 3 zone, said latest part version having recording compatibility with the recording/reproducing
 4 apparatus is located at a byte position 19 through a byte position 20 of said physical format
 5 information zone, and said latest part version having reproducing compatibility with the
 6 recording/reproducing apparatus is located at a byte position 21 through said byte position 22
 7 of said physical format information zone.

1 20. The recording medium of claim 19, wherein said primary digit is located at a bit 4
 2 through a bit 7 of said byte positions 17 through 22 of said physical format information zone,
 3 and said first sub-digit is located at a bit 0 through a bit 3 of byte positions 17 through 22 of
 4 said physical format information zone.

1 21. The recording medium of claim 20, wherein the recording medium is a digital
 2 versatile disc (DVD).

1 22. A method of determining compatibility between a recording medium and a
 2 recording/reproducing apparatus, comprising:
 3 installing said recording medium in said recording/reproducing apparatus;
 4 comparing a base part version of the recording/reproducing apparatus with a detailed
 5 extended part version stored in a reserved zone of a physical format information zone of said
 6 recording medium; and
 7 determining recording compatibility based upon said step of comparing said base part
 8 version with said detailed extended part version,
 9 wherein said detailed extended part version is recorded in the form of n.x.

1 23. A method of determining compatibility between a reproducing medium and a
 2 recording/reproducing apparatus, comprising:
 3 installing said reproducing medium in said recording/reproducing apparatus;

4 comparing a base part version of the recording/reproducing apparatus with a detailed
5 extended part version stored in a reserved zone of a physical format information zone of said
6 reproducing medium; and
7 determining reproducing compatibility based upon said step of comparing said base part
8 version with said detailed extended part version
9 wherein said detailed extended part version is recorded in the form of n.x.

1 24. The method of claim 22, wherein said comparing of said base part version with
2 said detailed extended part version further comprises comparing said base part version with a
3 latest part version having recording compatibility with the recording/reproducing apparatus
4 stored in said reserved zone.

5 25. The method of claim 23, further comprising:
6 comparing said base part version with a latest part version having reproducing
7 compatibility with the recording/reproducing apparatus stored in said reserved zone; and
8 determining a reproducing compatibility between the recording medium and the
9 recording/reproducing apparatus based upon said step of comparing said base part version with
10 said latest part version having reproducing compatibility with the recording/reproducing
11 apparatus.

12 26. The method of claim 25, wherein said reserved zone is 6 bytes in size, and said
13 latest part version having recording compatibility with the recording/reproducing apparatus,
14 and said latest part version having reproducing compatibility with the recording/reproducing
15 apparatus are each in the form of n.x, wherein n represents a specification change, and x
16 represents a specification change having no compatibility with the recording/reproducing
17 apparatus.

1 27. The method of claim 26, wherein said reserved zone is located at a byte position
2 17 through a byte position 22 of said recording medium.

1 28. The method of claim 25, wherein if the determining of the recording compatibility
2 indicates that there is recording compatibility, then recording is permitted, and if the
3 determining of the recording compatibility indicates that there is not recording compatibility,
4 then recording is prohibited;

5 and if the determining of the reproducing compatibility indicates that there is
6 reproducing compatibility, then the reproducing is permitted, and if the determining of the
7 reproducing compatibility indicates that there is not reproducing compatibility, then
8 reproducing is prohibited.

1 29. A recording/reproducing apparatus, comprising:
2 a control unit to record extended part version information in a reserved zone of a
3 physical format information zone of a recording medium, and
4 a reading unit to read the extended part version information from the recording
5 medium, wherein the extended part version information in the reserved zone comprises a
6 primary digit.

1 30. The recording/reproducing apparatus of claim 29, wherein the extended part
2 version information comprises a detailed extended part version.

3 31. The recording/reproducing apparatus of claim 30, wherein the extended part
4 version information further comprises a latest part version having recording compatibility with
5 the recording/reproducing apparatus in the reserved zone.

1 32. The recording/reproducing apparatus of claim 31, wherein the extended part
2 version comprises a latest part version having reproducing compatibility with the
3 recording/reproducing apparatus.

1 33. The recording/reproducing apparatus of claim 32, wherein the extended part
2 version information in the reserved zone comprises a first sub-digit immediately after said
3 primary digit.

1 34. The recording/reproducing apparatus of claim 33, wherein the control means
2 records said primary digit, and said first sub-digit in the form n.x.

1 35. The recording/reproducing apparatus of claim 34, wherein n represents a
2 specification change, and x represents a specification change having no compatibility with the
3 recording/reproducing apparatus.

4 36. The recording/reproducing apparatus of claim 35, wherein said detailed extended
5 part version further comprises a latest part version having recording compatibility, and the
6 comparing unit compares said base part version with said detailed extended part version by
7 comparing said base part version with the latest part version having recording compatibility
8 with the recording/reproducing apparatus stored in said reserved zone.

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